
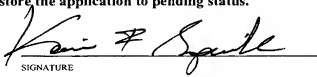


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FORM PTO-190 OFFICE (REV 11-2000)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK		ATTORNEY'S DOCKET NUMBER  <b>449122024700</b>	
<b>TRANSMITTAL LETTER TO THE UNITED STATES          DESIGNATED/ELECTED OFFICE (DO/EO/US)          CONCERNING A FILING UNDER 35 U.S.C. § 371</b>				U.S. APPLICATION NO. (If known, see 37 CFR 1.5) <b>10/069790</b> <b>Not yet assigned</b>	
INTERNATIONAL APPLICATION NO.  <b>PCT/DE00/02869</b>		INTERNATIONAL FILING DATE  <b>August 23, 2000</b>		PRIORITY DATE CLAIMED  <b>August 30, 1999</b>	
TITLE OF INVENTION  <b>METHOD AND SYSTEM FOR REDIRECTING TELECOMMUNICATIONS CONNECTIONS</b>					
APPLICANT(S) FOR DO/EO/US  <b>Sigrid HERTEL et al.</b>					
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information					
<ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a filing under 35 U.S.C. 371</li> <li>2. <input type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a filing under 35 U.S.C. 371</li> <li>3. <input type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.</li> <li>4. <input checked="" type="checkbox"/> The US has been elected by the expiration of 19 months from the priority date (PCT Article 31)</li> <li>5. <input type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2))           <ol style="list-style-type: none"> <li>a. <input checked="" type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau).</li> <li>b. <input checked="" type="checkbox"/> has been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US)</li> </ol> </li> <li>6. <input checked="" type="checkbox"/> An English language translation of the International Application under PCT Article 19 (35 U.S.C. 371(c)(2)).           <ol style="list-style-type: none"> <li>a. <input checked="" type="checkbox"/> is attached hereto.</li> <li>b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4)</li> </ol> </li> <li>7. <input type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))           <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau)</li> <li>b. <input type="checkbox"/> have been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.</li> <li>d. <input type="checkbox"/> have not been made and will not be made</li> </ol> </li> <li>8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).</li> <li>9. <input type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4))</li> <li>10. <input type="checkbox"/> An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).</li> </ol>					
<b>Items 11. to 16. below concern document(s) or information included:</b>					
<ol style="list-style-type: none"> <li>11. <input checked="" type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98.</li> <li>12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.</li> <li>13. <input type="checkbox"/> A FIRST preliminary amendment.</li> <li>14. <input type="checkbox"/> A SECOND or SUBSEQUENT preliminary amendment</li> <li>15. <input type="checkbox"/> A substitute specification</li> <li>16. <input type="checkbox"/> A change of power of attorney and/or address letter</li> <li>17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter 2 and 35 U.S.C. 1.821 - 1.825.</li> <li>18. <input type="checkbox"/> A second copy of the published international application under 35 U.S.C. 154(d)(4)</li> <li>19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4)</li> <li>20. <input checked="" type="checkbox"/> Other items or information: <b>1) Application Data Sheet; 2) International Search Report; 3) Return receipt postcard.</b></li> </ol>					
<b>CERTIFICATE OF HAND DELIVERY</b>					
I hereby certify that this correspondence is being hand filed with the United States Patent and Trademark Office in Washington, D.C. on February 28, 2002.					
 Melissa Carlson					

U.S. APPLICATION NO. (if known, see 37 CFR 1.5) <b>Not yet assigned</b> <b>10/069790</b>		INTERNATIONAL APPLICATION NO. PCT/DE00/02869		ATTORNEY DOCKET NO. 449122024700	
21. <input checked="" type="checkbox"/> The following fees are submitted: <b>BASIC NATIONAL FEE (37 CFR 1.492(a)(1)-(5)):</b> Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO ..... \$1,040.00 International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO ..... \$890.00 International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO ..... \$740.00 International preliminary examination fee (37 CFR 1.482) paid to USPTO but all claims did not satisfy provision of PCT Article 33(1)-(4) ..... \$710.00 International preliminary examination fee (37 CFR 1.482) paid to USPTO and all claims satisfied provisions of PCT Article 33(1)-(4) ..... \$100.00					<b>CALCULATIONS PTO USE ONLY</b>
<b>ENTER APPROPRIATE BASIC FEE AMOUNT =</b>				<b>\$890.00</b>	
Surcharge of <b>\$130.00</b> for furnishing the oath or declaration later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(e)).				<b>\$0</b>	
<b>CLAIMS</b>	<b>NUMBER FILED</b>	<b>NUMBER EXTRA</b>	<b>RATE</b>		
Total claims	- 20 =		x \$18.00	<b>\$0</b>	
Independent claims	- 3 =		x \$84.00	<b>\$0</b>	
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ \$280.00	<b>\$0</b>	
<b>TOTAL OF ABOVE CALCULATIONS =</b>				<b>\$890.00</b>	
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.				<b>\$0</b>	
<b>SUBTOTAL =</b>				<b>\$890.00</b>	
Processing fee of <b>\$130.00</b> for furnishing the English translation later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				<b>+</b> <b>\$0</b>	
<b>TOTAL NATIONAL FEE =</b>				<b>\$890.00</b>	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). <b>\$40.00 per property</b>				<b>+</b> <b>\$0</b>	
<b>TOTAL FEES ENCLOSED =</b>				<b>\$890.00</b>	
				<b>Amount to be refunded:</b>	<b>\$</b>
				<b>charged:</b>	<b>\$</b>
a. <input checked="" type="checkbox"/> Please charge my <b>Deposit Account No. 03-1952</b> (referencing Docket No. 449122024700) in the amount of \$890.00 to cover the above fees. A duplicate copy of this sheet is enclosed. b. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees that may be required, or credit any overpayment to <b>Deposit Account No. 03-1952</b> (referencing Docket No. 449122024700).  <b>NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive          (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.</b>  SEND ALL CORRESPONDENCE TO: Kevin R. Spivak Morrison & Foerster LLP 2000 Pennsylvania Avenue, N.W. Washington, D.C. 20006-1888					
 SIGNATURE  Kevin R. Spivak Registration No. 43,148  February 28, 2002					

## New Description Pages

# Method and system for redirection of telecommunications links

5

The present invention relates to a method and a system for redirection of telecommunications links, which, in particular, allows teleworkers to be included in a corporate network.

10

In addition to the normal basic services - in general, these comprise in setting up telecommunications links and transmitting user data for communication - the providers of public telecommunications networks offer a range of supplementary services. The present invention relates to the call redirection service, which allows a user to redirect incoming links, in various conditions, to other conditions, for example to automatic announcements, to an operator or to a variable connection at which the user can temporarily be reached.

25

Such call redirection is, for example, also used by so-called teleworkers. This expression means company employees who, in addition to their company work station, also work at home for the company and, in particular, are intended to be accessible by telephone there. Teleworkers such as these include, for example, insurance agents. When such a teleworker activates call redirection, incoming telephone calls to his company work station are automatically redirected to his home connection.

35

For about 15 years, it has been possible, for example with ISDN links and with analogue connections, to be notified of the telephone number of a caller. In the case of ISDN links, in parallel with the user data, which is used for communication, in the B channel,

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information data is in this case transmitted in the D channel, reflecting a connection identification, and this information data is evaluated and displayed by an appropriately designed telecommunications apparatus.

5 When, during his work the teleworker thus calls a customer from home, then it is possible for the customer, without any problems, to learn the private number of the teleworker. The customer would then be able to call the teleworker at home even in time

10 periods in which he is not working at all, and could thus disturb him in his free time. A further problem could also arise, for example, if the teleworker changes his place of work, and is working in the same

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field for a new company. This change would not be evident to a customer who knew only the teleworker's private number, so that such a customer could possibly likewise change his insurance. However, a change such  
5 as this would be undesirable to the companies themselves.

One object of the present invention is thus to specify a method for redirection of telecommunications links, which offers a high level of flexibility and in which  
10 the redirection of the telecommunications links is not evident to anyone externally.

The object is achieved by a method which has the  
15 features of claim 1.

One advantageous refinement of the invention is described in claim 2. Accordingly, with the method according to the invention, a business caller in  
20 principle is informed only of the company number, but not of the private number. From the point of view of the

station) instead of the connection identification of the second telecommunications connection. Accordingly, with the method according to the invention, a business caller in principle is informed only of the company number, but not of the private number. From the point of view of the customer, he is thus in principle calling his insurance agent at his company work station, and/or is being called by his insurance agent from his company work station. This thus makes it possible, in accordance with German labour laws, to ensure that the teleworker cannot be disturbed during his free time, since business calls are redirected to him at home only when he has registered for call redirection.

Developments of the invention are the subject matter of the dependent claims. If the company connection of the teleworker is a main connection, then the telecommunications links are normally redirected in the public switching centers themselves. For this purpose, for example, the public switching center for the first telecommunications connection includes means for storage of the connection identification of the first telecommunications connection, of the second telecommunications connection to which, when necessary, the link is redirected, and of status information which indicates whether redirection should or should not be carried out. A link which has been set up to the first telecommunications connection is then redirected in this public switching center itself.

In a similar way, information which states what the response of the home connection of the teleworker should be is now also stored in the public switching center for the second telecommunications connection. This information includes inter alia, the connection identifications of the first and second telecommunications connections. When telecommunications

- links are set up from home connection, then, when necessary, the information data is automatically modified accordingly in this second public switching center. Since the telecommunications links are set up
- 5 in the public switching centers under computer control, the redirection and modification of the information data according to the invention can easily be carried out by an addition to the control software.
- 10 If the teleworker works for a relatively large company, then the connections to the company work stations are normally in this case combined in a private branch exchange (PBX). Modern private branch exchanges already allow the call redirection service. However,
- 15 redirection is in this case carried out only for telecommunications links which arrive in the private branch exchange and are then, when necessary, passed back from the private branch exchange via the public switching center to the home connection. The lines between the
- 20 private branch exchange and the public switching center are thus loaded twice by a redirected link. Furthermore, it is impossible to make outgoing calls from the home work station as if, from the point of view of the person being called, they have been made
- 25 from the company work station.

- In order to integrate connections within a private branch exchange into the concept of call redirection according to the invention, and to avoid unnecessarily
- 30 using resource lines between the private branch exchange and the public switching center, it is possible to store information in the private branch exchange controller and in the public switching center as to whether call redirection is or is not activated
- 35 for a specific private branch exchange connection. Telecommunications links which have been set up from an external telecommunications connection to this private branch exchange connection are, just like the main

- connections, redirected to the home connection in the public switching center itself. Furthermore, telephone calls from a fourth telecommunications connection, which is likewise a connection within the private branch exchange, are easily passed to the public switching center when call redirection is activated, and redirected from there to the home connection on the basis of the stored information.
- 5
- 10 A situation can also occur in which the teleworker wishes to call a private branch exchange connection from his home connection. In this case, it is possible for the control software in the public switching center for the home connection to identify an internal telephone number within a private branch exchange, and to set up a link to that private branch exchange automatically. This means that it is not evident even to a telecommunications connection within the private branch exchange whether the teleworker is at his company work station or at his home work station.
- 20

- In accordance with one advantageous development, call redirection can be activated in a simple manner from the home work station, to be precise by setting up a telecommunications link to one of the two public switching centers that are involved, and by transmitting a suitable control signal, for example by entering a specific code and/or a PIN number. The information that call redirection is activated is then at the same time also transmitted to the other public switching center. If the company work station is part of a private branch exchange, then it is possible to provide for an appropriate control signal to be transmitted to the private branch exchange as well. If the private branch exchange is unable to receive such a control signal, then the desired redirection can be reported to the private branch exchange actually on leaving the company work station, with the final call
- 25
- 30
- 35



redirection then being activated from the teleworker's home. In the intervening time, it is possible to provide for all links set up to that company connection to be passed to a mailbox.

5

Even after activation of call redirection, it is often desirable still to have the capability to make private calls from the home connection. It is thus possible to provide for the modification of the information data to be suppressed for this one call by dialing a specific code, which is identified by the public switching center for the home work station. It is thus very easy to distinguish in the public switching center for the home connection whether a call that is currently being made is a business call or a private call, so that separate accounts can be produced.

In the simplest embodiment, the information relating to the telecommunications connections between which redirection is intended to be set up is stored within a table in the public switching centers, with a second telecommunications connection to which a telecommunications link is intended to be redirected being permanently preset for a respective first telecommunications connection. Further claims relate to more flexible extension of the method according to the invention. For example, it may be desirable to have the capability to register for call redirection from any desired external connection, and for the second connection to which telecommunications links should be redirected to be stated only on registration. This then makes it possible, for example, for telephone calls to be redirected from a company work station to any desired connection at which someone is temporarily accessible (for example to a hotel connection while travelling on business). Furthermore, it is possible to redirect the links to a mobile telephone.

On the basis of a further aspect of the invention and according to the independent claim 11, a system is proposed by means of which such a redirection method can be carried out. A major component of the system is

5 a switching center which is linked to the company connection and has means for storage of the connection identification of the company connection, of the connection identification of the home connection, and of status information which states whether the

10 redirection should be carried out. Furthermore, the switching center includes means for redirection of telecommunications links. In the same way, the home connection is linked to a further switching center, which likewise has means for storage of information

15 defining the response of the home connection. Furthermore, this switching center however, also includes means for modification of the information data, in order, according to the invention, to reflect another connection identification.

20

The invention will be explained in more detail in the following text with reference to the attached drawing, in which:

25 Figure 1 shows a scheme for the telecommunications connections and switching centers involved in the method according to the invention;

Figure 2 shows the redirection of telecommunications

30 links which have been set up to the company work station, to the home work station;

Figure 3 shows the setting up of telecommunications links from the home work station;

35

Figure 4 shows the response of the home connection for private and business telephone calls.

The method according to the invention is preferably implemented by means of Centrex (Central Office Exchange Service). This means a service packet in the public network, which provides means to set up a corporate network with extension functions. A Centrex makes it possible to combine the first telecommunications connection A1 at the company work station with the second telecommunications connection A2, that is to say the home connection, logically in the network-wide so-called Centrex group. In the example illustrated in Figure 1, the first telecommunications connection A1 is part of a private branch exchange PBX, which has at least one further exchange connection A4. This private branch exchange PBX is linked to the telecommunications network N via the public switching center VST1 for the private branch exchange PBX. This public switching center VST1 has a memory apparatus, referred to in the following text as a teleworker list L1, which allows rapid access to the data for that teleworker, and the numbers of his company connection A1 and his home connection A2. Furthermore, status information is stored for each pair of connections A1, A2 stored in the teleworker list L1, stating whether redirection should or should not be carried out. Similar information is also stored in a second teleworker list L2, which is part of the public switching center VST2 for the home connection A2. This defines the intended reaction of the home connection A2 when setting up telecommunications links.

Call redirection is activated by the teleworker from his home connection A2 by entering a predetermined access code, followed by a personal PIN number, to identify him. This is identified by the switching center VST2 for the home connection A2, the registration status is modified as appropriate, and information is also passed to the switching center VST1 for the company connection A1. Call redirection can be

deactivated once again, as well, in the same way. It is then, for example, possible to record the times of registration and deregistration, and thus the teleworker's working hours, as well.

5

The complete registration process is preferably carried out directly from the teleworker's home connection A2. However, it might also be necessary for the teleworker to report a call redirection to the private branch exchange PBX from his company connection A1 when leaving the company work station, with call redirection not finally being activated until he is at home. However, since the teleworker is unable to receive calls in the intervening time period, it is possible for links which have been set up to the company connection A1 to be passed during this time period to a mailbox M which is part of the public switching center VST1 for the company connection A1, with this mailbox M then receiving messages, or emitting an appropriate announcement.

Figure 2 shows the redirection process according to the invention for telecommunications links which have been set up to the company work station A1 of the teleworker. If, for example, a customer dials on his external connection A3 the number of the company work station A1 of the teleworker, then a link is first of all set up to the public switching center VST1 for the company work station A1. However, on the basis of the information stored in the teleworker list L1, the public switching center VST1 identifies the fact that the call should be redirected to the telecommunications connection A2. The telecommunications link is then redirected directly from there, so that the lines between the public switching center VST1 and the company private branch exchange PBX are not loaded. Furthermore, this redirection is not evident to the telecommunications connection A3, so that, from his

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point of view, the customer is calling the teleworker at his company work station A1.

- If the company work station A1 is called from a connection A4, which is likewise integrated in the private branch exchange PBX, then it is normally sufficient in private branch exchanges to dial only the shortened direct dialing number of the extension connection. Thus at this point in order to make it possible to carry out redirection to the home connection A2 in this case as well, at least information as to whether a link which has been set up to the connection A1 should or should not be redirected is thus stored in the private branch exchange PBX. When registering for call redirection, the corresponding information can be sent from the switching center VST1 by means of QSIG (Q-(Reference Point) Signaling). When redirection is desired, the link is simply passed to the public switching center VST1 for the private branch exchange PBX. The public switching center VST1 then once again identifies a telecommunications link set up for the connection A1, and this link is then redirected to the home connection A2, on the basis of the information stored in the teleworker list L1. The redirection process is not evident to the caller in this case either. As before, of course, it is still possible to reach the teleworker at his home work station A2 using his normal private number.
- When telecommunications links are redirected, it is possible to arranged for the caller to be charged only for setting up the link to the public switching center VST1, but for the cost of the remaining connecting path to be at the expense of the teleworker (or his company).

Figure 3 shows how telecommunications links originating from the home connection A2 of the teleworker are set

up. When this teleworker dials the number of the connection A3 (for example a customer), then the telecommunications link is set up via the public switching center VST2 for the home connection A2 and the telecommunications network N to the external connection A3, in the known manner. However, in addition, the information which is stored in the teleworker list L2 in the public switching center VST2 is now used to modify the information data transmitted in parallel. If the customer at the connection A3 is able to identify the caller on the basis of the information data, the number of the company connection A1 now appears in his display, rather than the number of the home connection A2. From the point of view of the connection A3, the telecommunications link has thus originated from the company connection A1. This prevents the customer from learning the private number of the teleworker, and possibly being able to call him during his free time.

If, on the other hand, the teleworker wants to call a colleague at his company work station A4 from his home connection A2, then it is sufficient for him just to dial the extension-internal direct-dialing number even on his home connection A2. This is identified by the public switching center VST2, and the telecommunications link is automatically passed via the public switching center VST1 to the private branch exchange PBX and from there to the extension connection A4. The sequence for call redirection is essentially the same if the teleworker's company connection is not an extension connection but an individual connection, for example the connection A5 shown in the drawing. The only change is that the intermediate step of passing on links via the private branch exchange PBX is omitted, although the telephone number display is modified as before.

If is also possible to provide for the teleworker to make and receive private calls from his home connection A2, even after registering for call redirection. In this case, he first of all dials a specific control code, in order temporarily to suppress the modification of the information data, and he then dials the desired telephone number. The private number of the connection A2 rather than the company number of the connection A1, then appears at the connection being called.

Figure 4 shows the response of the home connection A2 and of the public switching center VST2, once again schematically. When call redirection is not activated (top) the connection A2 behaves like a normal private telephone connection, with the private subscriber profile TP1. This subscriber profile TP1 states, for example, the telephone number of which the connection A2 can be accessed, and whether this connection A2 has any associated additional services (call waiting, mailbox etc.). In addition, the data which is required for call redirection and which defines the teleworker profile TP2 is already stored in the teleworker list L2, although initially it has no influence on the behavior of the connection A2.

When the teleworker registers for call redirection, then the connection A2 is also associated with the teleworker profile TP2. The actual response of the connection A2 then depends on the incoming and outgoing telecommunications links. When a link is set up to the connection A2 which was initially set up to the company connection A1 but was then redirected, or if, after registering for call redirection, the teleworker dials a number, the connection A2 responds on the basis of the teleworker profile TP2 in the same way as the company connection A1. In the case of incoming links which have been set up by dialing the private number or by entering the previously mentioned control code, the

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connection A2 responds like the normal private connection, however, in accordance with the normal subscriber profile TP1.

- 5 It would now also be feasible for the person using the extension connection A1 to be a teleworker as well, who is likewise registered for the call redirection method. In this case, a telecommunications link is then passed from the home connection A2 of the calling teleworker
- 10 to the public switching center VST1 for the private branch exchange PBX. The private branch exchange PBX recognizes that the telecommunications link which has been set up to the extension connection A4 should be redirected, and the telecommunications link is
- 15 automatically redirected to the home connection of the second teleworker. The data for this second teleworker is then also stored in the teleworker lists for the switching center VST1 and in the public switching center for the home connection of the second
- 20 teleworker.

- On the basis of a first embodiment, the company connection A1 of the teleworker is permanently associated with his home connection A2 in the tele-
- 25 worker list L1, thus allowing very rapid access to the data and counteracting possible misuse of the call redirection process. However, for flexibility reasons, it is possible for the second connection, which is associated with the company connection A1 and to which
- 30 a telecommunication link should be redirected, to be defined only on registration. This may be done, for example, by the teleworker dialing a specific control code for activation of call redirection, followed by the number of the desired second connection (although
- 35 it would also be possible for this to be identified automatically) as well as a personal PIN number to identify him, from that connection to which the links should be redirected. Then, for example, the teleworker



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list L1 would initially contain only information as to which personnel are authorized to make use of the redirection service. The information can then be added to just on registration. In this case, the teleworker  
5 profile TP2 shown in Figure 4 would be produced, and loaded in the public switching center VST2 for the second connection A2, only on registration for call redirection. It is thus possible to be included in the system from any desired public connection. Furthermore,  
10 it would then also be possible to redirect the calls to a mobile radio telephone (for example a GSM telephone).

Since the method according to the invention can be implemented by addition to the switching center  
15 technology, this means that it is independent of the locations of the connections. However, any location change just requires that a new entry be added to the teleworker list, that is to say it involves only a small amount of administration effort.

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## New Patent Claims

1. A method for redirection of telecommunications links, when a telecommunications link which has been  
5 set up to a first telecommunications connection (A1, A5) is automatically redirected to a second telecommunications connection (A2), and information data which reflects a connection identification being transmitted in parallel with the user data by means of the  
10 telecommunications link,  
characterized  
in that a public switching center (VST1) for the first telecommunications connection (A1, A5) and a public switching center (VST2) for the second telecommunications connection (A1, A5) have means (L1) for storage  
15 of the connection identification of the first telecommunications connection (A1, A5), of the connection identification of the second telecommunications connection (A2) and of status information which  
20 states whether the redirection should be carried out, and in that the redirection to the second telecommunications connection (A2) is carried out in the public switching center (VST1) for the first telecommunications connection (A1, A5).
- 25
2. The method as claimed in claim 1,  
characterized  
in that, in the status of the redirection of the telecommunications links for the first telecommunications  
30 connections connection (A1, A5) to the second telecommunications connection (A2), both on setting up a telecommunications link from the second telecommunications connection (A2) to a third telecommunications connection (A3) and when setting up a telecommunications link from a third telecommunications  
35 connection (A3) to the second telecommunications connection (A2), the information data which is transmitted in parallel with the user data by means of

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the telecommunications link is modified in the public switching centers (VST1, VST2) such that it reflects the connection identification of the first telecommunication connection (A1, A5) instead of the connection  
5 identification of the second telecommunications connection (A2).

3. The method as claimed in one of claims 1 or 2, characterized  
10 in that the first telecommunications connection (A1) is a connection within a private branch exchange (PBX).

4. The method as claimed in claim 3, characterized  
15 in that the private branch exchange (PBX) has means for storage of the connection identification of the first telecommunications connection (A1) and of status information which states whether a redirection should take place,  
20 and in that a telecommunications link which originates from a fourth telecommunications connection (A4), which is likewise a connection within the private branch

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exchange (PBX), and has been set up to the first telecommunications connection (A1) is redirected to the public switching center (VST1) for the first telecommunications connection (A1) or for the private  
5 branch exchange (PBX), and from there to the second telecommunications connection (A2).

5. The method as claimed in claim 4,  
characterized  
10 in that, when an extension-internal connection identification is entered, a telecommunications link which originates from the second telecommunications connection (A2) is passed to the private branch exchange (PBX) and to the corresponding private branch  
15 exchange connection (A4).

6. The method as claimed in one of the preceding claims,  
characterized in that the process of modifying the  
20 information data can be temporarily switched off by entering a specific control signal.

7. The method as claimed in one of the preceding claims,  
25 characterized  
in that this method can be activated from the second telecommunications connection (A2) by entering a pre-determined access code.

30 8. The method as claimed in one of the preceding claims,  
characterized  
in that the second telecommunications connection (A2), which is associated with the first telecommunications  
35 connection (A1, A5), is permanently preset.

9. The method as claimed in one of claims 1 to 8,  
characterized

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in that the second telecommunications connection (A2), which is associated with the first telecommunications connection (A1, A5), can be selected freely by transmission of a control signal when the redirection method is activated.

10. A system for redirection of telecommunications links, which have been set up to a first telecommunications connection (A1, A5), to a second telecommunications connection (A2), having:
- 10 a switching center (VST1) which is linked to the first telecommunications connection (A1, A5) and has means (L1) for storage of the connection identification of the first telecommunications connection (A1, A5), of
- 15 the connection identification of the second telecommunications connection (A2), of status information which states whether the redirection should be carried out, and means for redirection of telecommunications links to the second connection (A2);

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- a second switching center (VST2), which is linked to the second telecommunications connection (A2) and has means for storage of the connection identification of the first telecommunications connections (A1, A5) and
- 5 of the connection identification of the second telecommunications connection (A2), and has means for modification of information data which reflects a connection identification.
- 10 11. The system as claimed in claim 10, characterized
- in that said system also includes a private branch exchange (PBX), when the first telecommunications connection (A1) being integrated in this private branch
- 15 exchange (PBX), and the private branch exchange (PBX) having means for storage of information which states whether telecommunications links which have been set up to the first telecommunications connection (A1) should be redirected.

GR 99 P 2699

# Abstract

Method and system for redirection of telecommunications links

In a method for redirection of telecommunications links, telecommunications links which have been set up to a first telecommunications connection (A1) are redirected to a second telecommunications connection (A2), and information data which reflects a connection identification is also transmitted. When setting up a telecommunications link from the second telecommunications connection (A2) to a third telecommunications connection (A3), the information data is modified such that it reflects the connection identification of the first telecommunications connection (A1) instead of the connection identification of the second telecommunications connection (A2).

Figure 3

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FIG 1

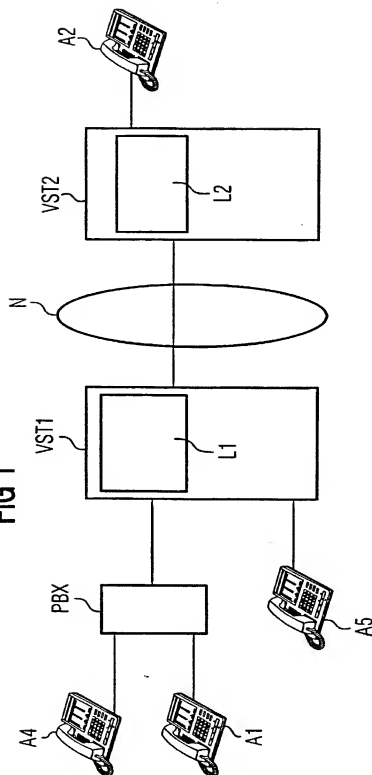
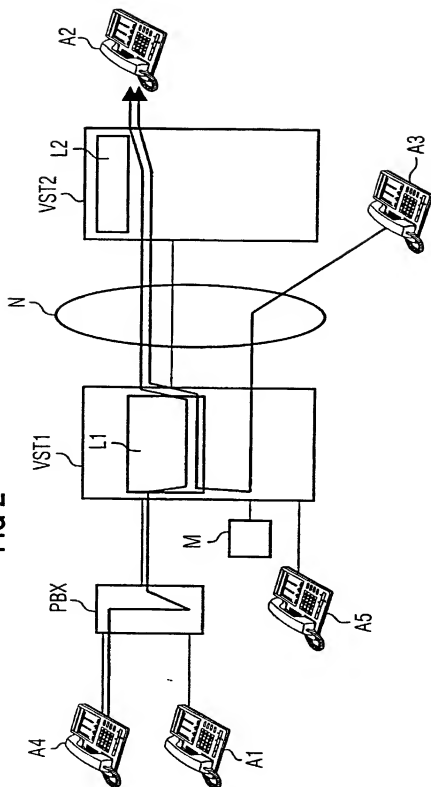




FIG 2



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FIG 3

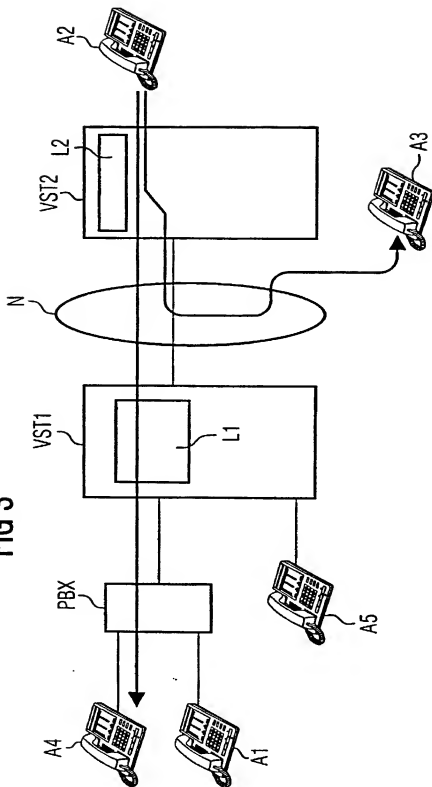
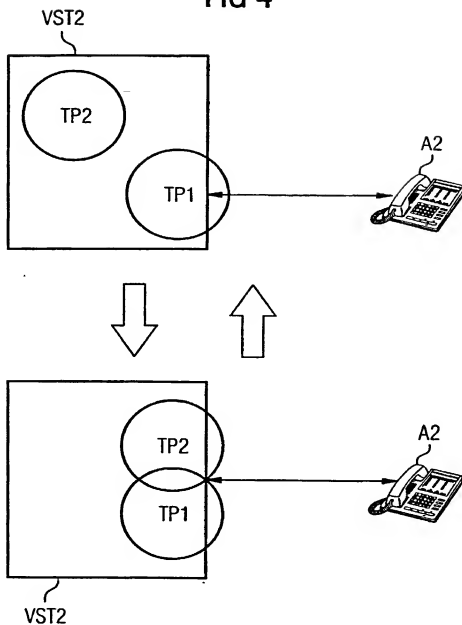


FIG 4



**Declaration and Power of Attorney For Patent Application**  
**Erklärung Für Patentanmeldungen Mit Vollmacht**  
German Language Declaration

Als nachstehend benannter Erfinder erkläre ich hiermit an Eides Statt:

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dass ich, nach bestem Wissen der ursprüngliche, erste und alleinige Erfinder (falls nachstehend nur ein Name angegeben ist) oder ein ursprünglicher, erster und Mitfinder (falls nachstehend mehrere Namen aufgeführt sind) des Gegenstandes bin, für den dieser Antrag gestellt wird und für den ein Patent beantragt wird für die Erfindung mit dem Titel:

Verfahren und System zum Umlenken  
von Fernmeldeverbindungen

deren Beschreibung

(zutreffendes ankreuzen)

☐ hier beigefügt ist.

☒ am 23.08.2000 als

PCT Internationale Anmeldung

PCT Anmeldungsnummer PCT/DE00/02869

eingereicht wurde und am 22.02.2002

abgeändert wurde (falls tatsächlich abgeändert).

Ich bestätige hiermit, dass ich den Inhalt der obigen Patentanmeldung einschliesslich der Ansprüche durchgesehen und verstanden habe, die eventuell durch einen Zusatzantrag wie oben erwähnt abgeändert wurde.

Ich erkenne meine Pflicht zur Offenbarung irgendwelcher Informationen, die für die Prüfung der vorliegenden Anmeldung in Einklang mit Absatz 37, Bundesgesetzbuch, Paragraph 1.56(a) von Wichtigkeit sind, an.

Ich beanspruche hiermit ausländische Prioritätsvorteile gemäss Abschnitt 35 der Zivilprozessordnung der Vereinigten Staaten, Paragraph 119 aller unten angegebenen Auslandsanmeldungen für ein Patent oder eine Erfindersurkunde, und habe auch alle Auslandsanmeldungen für ein Patent oder eine Erfindersurkunde nachstehend gekennzeichnet, die ein Anmeldedatum haben, das vor dem Anmeldedatum der Anmeldung liegt, für die Priorität beansprucht wird.

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

Method and system for redirecting  
telecommunications connections

the specification of which

(check one)

☐ is attached hereto.

☒ was filed on 23.08.2000 as

PCT International application

PCT Application No. PCT/DE00/02869

and was amended on 22.02.2002

(if applicable)

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

## German Language Declaration

Prior foreign applications  
Priorität beansprucht

Priority Claimed

19941151.4

(Number)  
(Nummer)

DE

(Country)  
(Land)

30.08.1999

(Day Month Year Filed)  
(Tag Monat Jahr eingereicht)

☒

Yes

☐

No

Ja Nein

(Number)  
(Nummer)

(Country)  
(Land)

(Day Month Year Filed)  
(Tag Monat Jahr eingereicht)

☐

Yes

☐

No

Ja Nein

(Number)  
(Nummer)

(Country)  
(Land)

(Day Month Year Filed)  
(Tag Monat Jahr eingereicht)

☐

Yes

☐

No

Ja Nein

Ich beanspruche hiermit gemäss Absatz 35 der Zivilprozessordnung der Vereinigten Staaten, Paragraph 120, den Vorzug aller unten aufgeführten Anmeldungen und falls der Gegenstand aus jedem Anspruch dieser Anmeldung nicht in einer früheren amerikanischen Patentanmeldung laut dem ersten Paragraphen des Absatzes 35 der Zivilprozessordnung der Vereinigten Staaten, Paragraph 122 offenbart ist, erkenne ich gemäss Absatz 37, Bundesgesetzbuch, Paragraph 1.56(a) meine Pflicht zur Offenbarung von Informationen an, die zwischen dem Anmeldedatum der früheren Anmeldung und dem nationalen oder PCT internationalen Anmeldedatum dieser Anmeldung bekannt geworden sind.

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §122, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application.

PCT/DE00/02869

(Application Serial No.)  
(Anmeldeseriennummer)

23.08.2000

(Filing Date D, M, Y)  
(Anmeldedatum T, M, J)

anhängig

(Status)  
(patentiert, anhängig,  
aufgegeben)

pending

(Status)  
(patented, pending,  
abandoned)

(Application Serial No.)  
(Anmeldeseriennummer)

(Filing Date D, M, Y)  
(Anmeldedatum T, M, J)

(Status)  
(patentiert, anhängig,  
aufgeben)

(Status)  
(patented, pending,  
abandoned)

Ich erkläre hiermit, dass alle von mir in der vorliegenden Erklärung gemachten Angaben nach meinem besten Wissen und Gewissen der vollen Wahrheit entsprechen, und dass ich diese eidesstattliche Erklärung in Kenntnis dessen abgebe, dass wissenschaftlich und vorsätzlich falsche Angaben gemäss Paragraph 1001, Absatz 18 der Zivilprozessordnung der Vereinigten Staaten von Amerika mit Geldstrafe belegt und/oder Gefängnis bestraft werden können, und dass derartig wissenschaftlich und vorsätzlich falsche Angaben die Gültigkeit der vorliegenden Patentanmeldung oder eines darauf erteilten Patentes gefährden können.

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## German Language Declaration

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Staatsangehörigkeit		Citizenship	
Postanschrift		Post Office Address	

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